1. A vial comprising an outer wall, said outer wall being straight, cylindrical and having a central axis, an inner cavity, said inner cavity being curved, and having a central axis which is curved and spaced away from the central axis of the outer wall, said inner cavity being curved in a substantially uniform arc having a single apex and having a uniform axial diameter throughout its length, opposed ends spaced from the apex and opposed spaced sides, planes tangent to said opposed spaced sides are at an angle of 90 degrees from the apex, the apex of the curved inner cavity being closer to the cylindrical outer wall of the vial than the opposed ends of the inner cavity, said inner cavity is substantially uniform in cross section throughout its length, planes tangent to the sides of the cavity are parallel to each other and at right angles to a plane tangent to said apex, one end of said cavity terminates in an end wall perpendicular to the said outer wall, said end wall having inner and outer faces parallel to each other, the other end of said cavity is open and wherein a cap is adapted to close the said open end, and orienting means which extend from and are integral said outer walls to permit proper orientation and mounting of the vial in a level and to prevent rotation of the vial when mounted in a level, said orienting means extending outwardly away from said outer walls in a direction away from said inner cavity.

8. The vial as set forth in claim 1 wherein said orienting means comprise a pair of keys which extend from and are integral with the outer wall of said vial adjacent said open end, said keys extending in opposite directions away from each other.

9. A vial comprising an outer wall, said outer wall being straight, cylindrical and having a central axis, an inner cavity, said inner cavity being curved, and having a central axis which is curved and spaced away from the central axis of the outer wall said inner cavity being curved in a substantially uniform arc having a single apex and having a uniform axial diameter throughout its length, opposed ends spaced from the apex and opposed spaced sides, planes tangent to said opposed edges are at an angle of 90 degrees from the apex, the apex of the curved

inner cavity is closer to the cylindrical outer wall of the vial than the opposed ends of the inner cavity, the said cavity is substantially uniform in cross section throughout its length, planes tangent to the sides of the cavity are parallel to each other and at right angles to a plane tangent to said apex, one end of said cavity terminates in an end wall, the other end of said cavity is open and wherein a cap is adapted to close the said open end, a pair of keys extend from the outer wall of said vial adjacent said open end, said keys extending in opposite directions from each other, each of said keys have edge and side walls at right angles to each other, each of said walls being tangent to the outer wall of the vial with one of said walls being parallel to the plane tangent to the apex of the cavity.

13. A level having a pair of opposed parallel rails, a web perpendicular to said rails and connecting the rails together, a vial-receiving opening in said web, said vial-receiving opening having opposed notches therein, said opposed notches having an end wall and spaced side walls at right angles to said end wall, at least one vial mounted in said vial-receiving opening, the opposed ends of the vial being mounted in the opposed notches, said vial comprising an outer wall, said outer wall being straight, cylindrical and having a central axis, an inner cavity within said vial, said inner cavity being curved and having a central axis which is curved and spaced away from the central axis of the outer wall, and orienting means are provided in said outer wall to permit proper orientation and mounting of said vial in the notches in said vial-receiving opening, the inner cavity is curved in a substantially uniform arc having a single apex and having a uniform axial diameter throughout its length, opposed ends spaced from the apex and opposed spaced sides at an angle of 90 degrees from the apex, the apex of the curved inner cavity is closer to the cylindrical outer wall of the vial then the ends of the inner cavity and wherein a plane tangent to said apex is parallel to said rails, the said cavity is substantially uniform in cross section throughout its length, planes tangent to the sides of the cavity are parallel to each other

and at right angles to a plane tangent to said apex, one end of said cavity terminates in an end wall perpendicular to said outer wall, said end wall having inner and outer faces parallel to each other, the other end of said cavity is open and wherein a cap is adapted to close the said open end, said orienting means comprise a pair of keys extending and integral with the outer wall of said vial adjacent said open end, said keys extending in opposite directions away from each other and from said outer walls in a direction away from the inner cavity, said keys adapted to be received in the opposed notches, thereby preventing rotation of the vial when mounted in the level.

20. A level having a pair of opposed parallel rails, a web perpendicular to said rails and connecting the rails together, a vial-receiving opening in said web, said vial receiving opening having opposed notches therein, said opposed notches having an end wall and spaced side walls at right angles to said end wall, at least one vial mounted in said vial-receiving opening, the opposed ends of the vial being mounted in the opposed notches, said vial comprising an outer wall, said outer wall being straight, cylindrical and having a central axis, an inner cavity within said vial, said inner cavity being curved and having a central axis which is curved and spaced away from the central axis of the outer wall, and orienting means are provided in said outer wall to permit proper orientation and mounting of said vial in the notches in said vial-receiving opening, the inner cavity is curved in a substantially uniform arc having a single apex and having a uniform axial diameter throughout its length, opposed ends spaced from the apex and opposed spaced sides at an angle of 90 degrees from apex, the apex of the curved inner cavity is closer to the cylindrical outer wall of the vial than the ends of the inner cavity and wherein a plane tangent to said apex is parallel to said rails, the said cavity is substantially uniform in cross section throughout its length, planes tangent to the sides of the cavity are parallel to each other and at right angles to a plane tangent to said apex, one end of said cavity terminates in an end wall perpendicular to said outer wall, said end wall having inner and outer faces parallel to each other,

the other end of said cavity is open and wherein a cap is adapted to close the said open end, said orienting means comprise a pair of keys extending from and integral with the outer wall of said vial adjacent said open end, said keys extending in opposite directions away from each other and from said outer walls in a direction away from the inner cavity, said keys adapted to be received in the opposed notches, thereby preventing rotation of the vial when mounted in the level.

21. A level as set forth in Claim 20, wherein each of said keys have edge and side walls at right angles to each other, each of said walls having an end edge, said end edges being tangent to the outer wall of the vial with one of said walls being parallel to the plane tangent to the apex of the cavity, said edge and side wall adapted to abut the end and side walls of the notches.

35. A method of making a vial having an outer wall and an inner cavity comprising the steps of forming the outer wall in a straight cylindrical configuration, forming the inner cavity of the vial in a curve, said inner cavity and the outer straight cylindrical wall being formed simultaneously.